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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/683,827

10/10/2003

George Henry Hofmann

AD6944 US NA

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08/23/2006

E I DU PONT DE NEMOURS AND COMPANY
LEGAL PATENT RECORDS CENTER
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4417 LANCASTER PIKE
WILMINGTON, DE 19805

EXAMINER

CHEN, VIVIAN

ART UNIT

PAPER NUMBER

1773

DATE MAILED: 08/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/683,827

Applicant(s)

HOFMANN, GEORGE HENRY

Examiner

Vivian Chen

Art Unit

1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2006 and 12 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 19-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☒ Claim(s) 17, 18 and 23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over NAKATSUJI ET AL (US 6,045,732);

in view of BEAVERS ET AL (US 4,665,153).

NAKATSUJI ET AL discloses a multilayer composite comprising a polyvinyl chloride layer, a polypropylene layer, and an intermediate adhesive layer, wherein the adhesive layer comprises 30-90 wt% polyester resin, 10-70 wt% of an ethylene copolymer containing epoxy groups, and minor amounts of a second ethylene copolymer; wherein the polyester can be a polyesterether; wherein the ethylene copolymer contain epoxy groups contains 20-99.9 wt% ethylene, 0.1-30 wt% glycidyl ester units, and 0-50 wt% other comonomers (e.g., alkyl acrylates, etc.). The composites are suitable for forming automotive and construction materials, wherein the composites have typical peel strength values of 2800 g/20 mm and more. (line 48, col. 1 to line 4, col. 2; line 15, col. 3 to line 27, col. 5; line 25-55, col. 13; Table 1) However, the reference does not explicitly disclose polyester elastomers.

BEAVERS ET AL '153 discloses that it is well known in the art to in the art to utilize elastomeric copolyesterethers containing units derived from polytetramethylene ether glycol as a bonding layer between other polymeric layers. (BEAVERS ET AL '153, line 55, col. 1 to line 60, col. 2)

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to known polyester-based elastomers with good adherent properties as the

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polyester component in NAKATSUJI ET AL in order to obtain delamination resistant laminates with desirable mechanical and stress-resistant properties. One of ordinary skill in the art would have selected the hardness of the polyester elastomer (claim 8, 11) depending on the flexibility, toughness, and other mechanical properties desired for specific usages. Regarding claim 16, the method of forming is a product-by-process limitation and is not further limiting in as so far as the structure of the product is concerned. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. *The patentability of a product does not depend on its method of production.* If the product in the product-by-process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." [emphasis added] *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). See MPEP 2113. Once a product appearing substantially identical is found, the burden shifts to applicant to show a *unobvious* difference between the claimed product and the prior art product. *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1993). The patentability of a product is based on the product itself, and is not dependent on its method of production.

Response to Arguments

2. Applicant's arguments filed 6/7/2006 and 6/12/2006 have been fully considered but they are not persuasive.

(A) In response to applicant's argument that NAKATSUJI ET AL and BEAVER ET AL '153 each fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., adhesive tie layer compositions which adhere to both polar and

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nonpolar polymers) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

(B) Applicant argues that NAKATSUJI ET AL fails to disclose the claimed invention because the reference requires the use of two tie layers. However, the presently rejected claims merely recite the presence of a tie layer between two outer layers, but: (1) does not preclude the presence of other tie layers; and (2) does not require that the recited adhesive layer contact both outer layer simultaneously.

(C) Applicant argues that BEAVER ET AL fails to disclose the claimed adhesive layer or adhesion to nonpolar polymers. However, as discussed above, the presently rejected claims do not require the ability to adhere nonpolar polymers. NAKATSUJI ET AL clearly discloses the use of polyesterether copolymers in a three-component adhesive composition, while BEAVER ET AL is relied upon to illustrate typical elastomeric polyesterethers used in adhesive formulations. Applicant has not provided probative evidence of criticality or unexpected results from the recited polyesterether elastomer in the recited adhesive composition.

Allowable Subject Matter

3. Claims 17-18, 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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4. The following is a statement of reasons for the indication of allowable subject matter:
The prior art of record fails to disclose or suggest the recited laminate comprising a tie layer wherein: (1) recited component (c) comprising an acid copolymer or an anhydride derivative thereof (claim 17-18); or (2) wherein said adhesive layer contacts both outer layers (claim 23)

5. The Examiner requests that claim 23 be amended to more clearly indicate the adhesive tie layer of claim 19 refers back to the adhesive tie layer of claim 1 (e.g., by using language such as “said adhesive tie layer” or “the adhesive tie layer”).

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vivian Chen whose telephone number is (571) 272-1506. The examiner can normally be reached on Monday through Thursday from 8:30 AM to 6 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney, can be reached on (571) 272-1284. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

The General Information telephone number for Technology Center 1700 is (571) 272-1700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

August 18, 2006



Vivian Chen
Primary Examiner
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